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This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 1-24. (Cancelled)

1 25. (Currently amended): A method for fabricating a magnetic head, comprising the steps of:

2 determining a location of an air bearing surface (ABS) of the magnetic head;

3 fabricating a write head above a substrate base, including the steps of:

4 fabricating a first magnetic pole;

5 fabricating an etch stop layer above said first magnetic pole;

6 fabricating an electrical insulation layer directly upon said etch stop layer and

7 above said first magnetic pole, such that no portion of said electrical insulation layer is disposed

8 ~~at an air bearing surface (ABS)~~ said ABS location of the magnetic head;

9 fabricating a fill layer around said electrical insulation layer, such that portions of

10 said fill layer are disposed at said ABS ~~surface~~ location;

11 fabricating an induction coil within said electrical insulation layer;

12 fabricating a second magnetic pole above said induction coil.

1 26. (Original): A method for fabricating a magnetic head as described in claim 25 wherein

2 said electrical insulation layer is composed of a substance selected from the group consisting of

3 an organic polymer and SiO₂.

1 27. (Original): A method for fabricating a magnetic head as described in claim 25 wherein

2 said induction coil is a single layer induction coil.

28. (Currently amended): A method for fabricating a magnetic head as described in claim 25 wherein said induction coil is a multiple layer induction coil, and wherein each layer of said multiple layer coil is fabricated within a separate electrical insulation layer, and each said electrical insulation layer is fabricated within a separate fill layer, and wherein no portion of either said electrical insulation layer is fabricated at said ABS surface location, and wherein portions of each said fill layer are fabricated at said ABS surface location.

29. (Original): A method for fabricating a magnetic head as described in claim 26 wherein said fill layer is comprised of Al_2O_3 .

30. (Currently amended): A method for fabricating a magnetic head as described in claim 29 wherein said etch stop layer is comprised of Al_2O_3 .

31. (Withdrawn): A method for fabricating a magnetic head, comprising the steps of:
fabricating a first magnetic pole (P1) upon previously fabricated elements of the magnetic head;
fabricating a P1 pole pedestal upon said P1 pole in magnetic connection therewith;
fabricating an etch stop layer upon said P1 pole;
fabricating an electrical insulation layer upon said etch stop layer, said electrical insulation layer being patterned such that no portion of said electrical insulation layer is deposited at an air bearing surface (ABS) of the magnetic head;
depositing a fill layer upon and around said insulation layer, portions of said fill layer being disposed at said ABS surface;

- 11 fabricating an induction coil within said electrical insulation layer;
- 12 fabricating a flat upper surface upon said P1 pedestal and induction coil;
- 13 fabricating a write gap layer upon said flat surface;
- 14 fabricating a P2 pole, upon said write gap layer.

1 32. (Withdrawn): A method for fabricating a magnetic head as described in claim 31
2 including the further steps of fabricating a patterned etching mask upon said electrical insulation
3 layer, and conducting a reactive ion etch process to etch said induction coil trenches into said
4 electrical insulation layer.

1 33. (Withdrawn): A method for fabricating a magnetic head as described in claim 31
2 wherein said etch stop layer is comprised of Al_2O_3 , and said electrical insulation layer is
3 comprised of a material selected from the group consisting of an organic polymer and SiO_2 .

1 34. (Withdrawn): A method for fabricating a magnetic head as described in claim 31
2 wherein said electrical insulation layer is comprised of an organic polymer and including the
3 further steps of
4 removing said organic polymer following said step of depositing said fill layer; and
5 depositing an SiO_2 electrical insulation layer in place of said organic polymer; and
6 fabricating said induction coil within said SiO_2 electrical insulation layer.

1 35. (Withdrawn): A method for fabricating a magnetic head as described in claim 34
2 wherein said fill layer is comprised of Al_2O_3 .

1 36. (Withdrawn): A method for fabricating a magnetic head, comprising the steps of:
2 fabricating a P1 pole layer upon previously fabricated elements of a magnetic head;
3 fabricating a P1 pole pedestal upon said P1 pole in magnetic connection therewith;
4 fabricating a first etch stop layer upon said P1 pole;
5 fabricating a first electrical insulation layer upon said etch stop layer, said first electrical
6 insulation layer being patterned such that no portion of said first electrical insulation layer is
7 deposited at an air bearing surface (ABS) of the magnetic head;
8 depositing a first fill layer upon and around said first insulation layer, portions of said
9 first fill layer being disposed at said ABS surface;
10 fabricating a first induction coil layer within said first electrical insulation layer;
11 fabricating a flat upper surface upon said P1 pedestal and first induction coil layer;
12 fabricating a write gap layer upon said flat surface;
13 fabricating a second electrical insulation layer above said write gap layer, said second
14 electrical insulation layer being patterned such that no portion of said second electrical insulation
15 layer is deposited at an air bearing surface (ABS) of the magnetic head;
16 depositing a second fill layer upon and around said second electrical insulation layer,
17 portions of said fill layer being disposed at said ABS surface;
18 fabricating a second induction coil layer within said second electrical insulation layer;
19 fabricating a third electrical insulation layer above said second induction coil layer;
20 fabricating a P2 pole yoke above said third electrical insulation layer.

1 37. (Withdrawn): A method for fabricating a magnetic head as described in claim 36
2 including the further steps of fabricating a patterned etching mask upon each said first and

3 second electrical insulation layers, and conducting a reactive ion etch process to fabricate said
4 first and second induction coil layers within said first and second electrical insulation layers
5 respectively.

1 38. (Withdrawn): A method for fabricating a magnetic head as described in claim 36
2 wherein said first and second etch stop layers are comprised of a Al_2O_3 ; and wherein said first
3 and second electrical insulation layers are comprised of a material selected from the group
4 consisting of an organic polymer and SiO_2 .

1 39. (Withdrawn): A method for fabricating a magnetic head as described in claim 36
2 wherein said first and second electrical insulation layers are comprised of an organic polymer,
3 and including the further steps of:
4 removing each said first and second organic polymer electrical insulation layers
5 following said step of depositing a fill layer; and
6 depositing an SiO_2 electrical insulation layer in place of each said first and second
7 organic polymer electrical insulation layers; and
8 fabricating said first and second induction coils within said SiO_2 electrical insulation
9 layers.

1 40. (Withdrawn): A method for fabricating a magnetic head as described in claim 39
2 wherein said first and second fill layers are comprised of Al_2O_3 .

1 41. (New): A method for fabricating a magnetic head as described in claim 25 including the
2 further steps of fabricating a patterned etching mask upon said electrical insulation layer, and
3 conducting a reactive ion etch process to etch induction coil trenches into said electrical
4 insulation layer down to said etch stop layer.

1 42. (New): A method for fabricating a magnetic head as described in claim 25 wherein said
2 etch stop layer is comprised of Al_2O_3 , and said electrical insulation layer is comprised of a
3 material selected from the group consisting of an organic polymer and SiO_2 .

1 43. (New): A method for fabricating a magnetic head as described in claim 25 wherein said
2 electrical insulation layer is comprised of an organic polymer and including the further steps of
3 removing said organic polymer following said step of fabricating said fill layer; and
4 depositing an SiO_2 electrical insulation layer in place of said organic polymer; and
5 fabricating said induction coil within said SiO_2 electrical insulation layer.

1 44. (New): A method for fabricating a magnetic head as described in claim 43 wherein said
2 fill layer is comprised of Al_2O_3 .

1 45. (New): A method for fabricating a magnetic head as described in claim 25 wherein said
2 induction coil is fabricated within said electrical insulation layer after said fill layer is fabricated.